

CLAIM AMENDMENT

Please amend the claims as follows:

1. (Currently amended) A seed of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.
2. (Currently amended) A corn plant of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.
3. (Original) A plant part of the corn plant of claim 2.
4. (Original) The plant part of claim 3, further defined as pollen, an ovule or a cell.
5. (Original) A corn plant expressing all of the physiological and morphological characteristics of the corn plant of claim 2.
6. (Original) The corn plant of claim 2, further comprising a nuclear or cytoplasmic gene conferring male sterility.
7. (Original) A method of producing a male sterile corn plant comprising introducing a nucleic acid molecule that confers male sterility into the plant of claim 2.
8. (Original) A male sterile corn plant produced by the method of claim 6.
9. (Currently amended) A tissue culture of cells of a plant of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.
10. (Previously presented) The tissue culture of claim 9, wherein the cells are obtained from embryos, immature embryos, meristematic cells, immature tassels, microspores, pollen, leaves, anthers, roots, root tips, silk, flowers, kernels, ears, cobs, husks, or stalks.

11. (Currently amended) A corn plant regenerated from the tissue culture of claim 9, wherein the corn plant expresses all of the physiological and morphological characteristics of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.

12. (Currently amended) A process of producing corn seed, comprising crossing a first parent corn plant with a second parent corn plant, wherein one or both of the first parent corn plant or the second parent corn plant is a plant of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975, wherein seed is allowed to form.

13. (Currently amended) The process of claim 12, further defined as a process of producing hybrid corn seed, comprising crossing a plant of corn variety LH249 with a second, distinct corn plant, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.

14. (Original) The process of claim 13, wherein crossing comprises the steps of:

- (a) planting the seeds of first and second inbred corn plants;
- (b) cultivating the seeds of said first and second inbred corn plants into plants that bear flowers;
- (c) preventing self pollination of at least one of the first or the second inbred corn plant;
- (d) allowing cross-pollination to occur between the first and second inbred corn plants; and
- (e) harvesting seeds on at least one of the first or second inbred corn plants, said seeds resulting from said cross-pollination.

15. (Original) The corn plant of claim 2, further comprising a transgene introduced by genetic transformation.

16. (Original) The corn plant of claim 15, wherein the transgene confers a trait selected from the group consisting of herbicide tolerance, insect resistance, disease resistance, waxy starch, decreased phytate content, modified fatty acid metabolism, modified carbohydrate metabolism, male sterility and restoration of male fertility.

17. (Currently amended) A method of producing a transgenic corn plant, comprising introducing a transgene into a plant of corn variety LH249, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975.

18. (Currently amended) A method of producing an inbred corn plant derived from the corn variety LH249, the method comprising the steps of:

- (a) preparing a progeny plant derived from corn variety LH249 by crossing a plant of the corn variety LH249 with a second corn plant, wherein a sample of the seed of the corn variety LH249 was deposited under ATCC Accession No. [[- - - -]] PTA- 7975;
- (b) crossing the progeny plant with itself or a second plant to produce a seed of a progeny plant of a subsequent generation;
- (c) growing a progeny plant of a subsequent generation from said seed and crossing the progeny plant of a subsequent generation with itself or a second plant; and
- (d) repeating steps (b) and (c) for an additional 2-10 generations to produce an inbred corn plant further derived from the corn variety LH249.

19. (Currently amended) A method of producing a conversion of the corn variety LH249 to express at least one new trait, the method comprising the steps of:

- (a) crossing a first corn plant having a first diploid genome comprising a plurality of paired chromosomes comprising a plurality of mappable genetic loci with a pair of alleles at each locus, and further comprising a genetic locus that confers at least one new trait, with a second plant of the corn variety LH249, a sample of the seed of the corn variety LH249 having been deposited under ATCC Accession No. [[- - - -]] PTA- 7975, the plant of the corn variety LH249 having a second diploid genome comprising a plurality of paired chromosomes comprising a plurality of

mappable genetic loci with a pair of alleles at each locus, to produce seed comprising a diploid genome having a plurality of paired chromosomes comprising a plurality of mappable genetic loci with a pair of alleles at each locus, wherein one of the alleles is contributed by the first corn plant and the other is contributed by the plant of the corn variety LH249, said genome further comprising the genetic locus that confers the new trait;

- (b) harvesting and planting the seed thereby produced to produce at least one progeny plant of the first filial generation, said progeny plant comprising a diploid genome comprising the genetic locus;
- (c) crossing said progeny plant with a plant of the corn variety LH249 to produce seed of a subsequent filial generation, the seed comprising a diploid genome having a plurality of paired chromosomes comprising a plurality of mappable genetic loci with a pair of alleles at each locus, wherein one of the alleles is contributed by the progeny plant and the other is contributed by the plant of the corn variety LH249, and further comprising the genetic locus that confers the new trait;
- (d) growing at least one progeny plant of the subsequent filial generation from the seed produced in step (c), said progeny plant comprising a genome comprising the genetic locus that confers the new trait;
- (e) repeating steps (c) and (d) for at least three additional generations to produce a converted plant of the corn variety LH249 wherein the plant comprises a diploid genome having a plurality of paired chromosomes comprising a plurality of mappable genetic loci with a pair of alleles at each locus, wherein both alleles at substantially all of the loci consist essentially of the allele found at the same locus in corn variety LH249, the genome further comprising the genetic locus that confers the new trait; and
- (f) harvesting the seed of the converted plant.

20. (Original) The method of claim 19, wherein the genetic locus was stably inserted into a corn genome by genetic transformation.

21. (Original) The method of claim 19, wherein the new trait is selected from the group consisting of herbicide tolerance; insect resistance; disease resistance; waxy starch; decreased phytate content, modified fatty acid metabolism, modified carbohydrate metabolism;; male sterility and restoration of male fertility.

22. (Original) A converted plant of the corn variety LH249 produced by the method of claim 19.

23-24. (Canceled)

25. (Previously presented) An F₁ hybrid seed produced by crossing the plant of claim 2 with a second, distinct corn plant.

26. (Previously presented) An F₁ hybrid plant grown from the seed of claim 25.